# FIRST QUARTER 2002 DRINKING WATER SUPPLY MONITORING REPORT

for East Clarendon, Vermont DEC Site #90-0532

February 18, 2002

Prepared for:

Ms. Judith A. Webster Clarendon General Store Box 314A - Route 103 East Clarendon, Vermont 05759

#### PREPARED BY



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Griffin Project # 10924304

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Prepared for:

C.H. Jorgensen, a corporation 79 River Cove Road Hilton Head, South Carolina 29926

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#### 1.0 INTRODUCTION

This report summarizes the results of drinking water supply monitoring performed during the first calendar quarter of 2002 in East Clarendon, Vermont (the Site; see Site Location Map in Appendix A). The work was designed and performed for C. H. Jorgensen, a corporation, of Hilton Head, South Carolina, and for Mrs. Judith Webster, d.b.a. Clarendon General Store, East Clarendon, Vermont, by Griffin International, Incorporated (Griffin) of Williston, Vermont. The quarterly sampling was conducted by Griffin on January 21 and 28, 2002.

Quarterly monitoring is scheduled for four water supply systems in East Clarendon, including the Alexander, Lukachina (a.k.a. Stoodley), and Loutit residences, and the Whispering Pines Park. While the Lukachina and Loutit residences share a supply well, each residence has its own water treatment system. An Area Map showing the locations of these water supply systems is included in Appendix A. Note that sampling at six other water supply systems, including the Cory, Lawson, and Ward residences, the Clarendon General Store, the Former Jorgensen's Honda building, and Lucky's Auto (see Area Map) is now performed by Griffin on an annual basis in July of each year. The change from quarterly sampling to annual sampling of these six systems was proposed in Griffin's previous report (Fourth Quarter 2001 Drinking Water Supply Monitoring Report, January 3, 2002), and was subsequently approved by Mr. Bob Haslam of the Vermont Department of Environmental Conservation. This sampling is performed for protection of human health and to ascertain the effectiveness of treatment systems at each of the water supply systems.

#### 1.1 Background

The area in the vicinity of Jorgensen's Honda and the Clarendon General Store was found to harbor subsurface petroleum contamination during an investigation performed in 1990. The subsurface investigation was initiated by the DEC upon discovery of gasoline contamination in area drinking water supplies. Additional subsurface investigations were performed in 1991. Drinking water supply systems in the area have been regularly monitored since the discovery of contamination in the early 1990s.

From 1992 through 1997, both the Jorgensen's Honda site and the Clarendon General Store site underwent active remediation of subsurface gasoline contamination. Active remediation of the sites continued until 1997, when the remedial systems were decommissioned. A new shared well and water supply system was installed in 1999, and continues to be in use. Documentation of prior actions at these sites is on-file with the DEC in Waterbury, Vermont.

#### 2.0 METHODOLOGY

During the reporting period, influent water quality of each water system was monitored by collecting and analyzing an untreated ("influent") water sample. The effectiveness of each treatment system was monitored by collecting and analyzing a sample(s) from treatment system midpoint and effluent sample ports. Generally, the samples are collected from each sample point after verifying that the



water system has run for at least 10 minutes before sampling, and after purging approximately one gallon of water through the sample port to remove any lingering water.

The samples were collected in pre-preserved (hydrochloric acid) 40-milliliter vials, which were labeled and subjected to chain of custody procedures. All samples were placed in coolers and were kept cool prior to delivery to the laboratory.

Each water treatment system has a water meter installed to measure flow through the system. Water meter readings were collected during the sampling. These readings were used to estimate the average daily water use at each sampled location.

Endyne, Incorporated Laboratory Services of Williston, Vermont performed the analytical work for the samples collected on January 21 and 28, 2002. Endyne utilized EPA Method 524.2 for analysis of volatile organic compounds (VOCs). Analytical results and detection limits were compared with the most recent, available drinking water standards, primarily Federal Maximum Contaminant Limits (MCLs) and, if an MCL is not available, State of Vermont Health Advisory Levels (VHAs). MCLs and VHAs were obtained from the document, "Vermont Department of Health Draft Drinking Water Guidance," dated May 2001.

#### 3.0 RESULTS

Water quality results are discussed below by sampling location. Refer to Appendix B for tabulated and graphical depiction of influent water quality data, and for the laboratory analytical reports.

#### 3.1 Alexander Residence

The influent sample collected from the Alexander residence on February 22, 2002 was reported to contain MTBE at a concentration of 2.0 ppb, which is below the VHA for MTBE (40.0 ppb). No other identifiable compounds or unidentified peaks (UIPs) were reported at concentrations above detection limits. The detection limits ranged from 0.5 ppb to 1.0 ppb. The average daily water usage during this period was 41 gallons per day.

#### 3.2 Loutit Residence

MTBE was reported at 40.4 ppb in the influent water sample collected from the Loutit residence on February 28, 2002, which slightly above the VHA for MTBE (40.0 ppb). Total trihalomethanes were reported at a concentration of 2.8 ppb, and 1,2-dichloroethane was reported at a concentration of 1.6 ppb. No other identifiable compounds or UIPs were reported. The detection limits ranged from 0.5 ppb to 1.0 ppb. The average daily water usage during this period was 367 gallons per day. Note that the supply well for the Loutit residence is shared by the Lukachina residence.



#### 3.3 Lukachina Residence

MTBE was reported at 52.5 ppb in the influent water sample collected from the Lukachina (Stoodley) residence on February 22, 2002, which is in excess of the VHA for MTBE (40.0 ppb). 1,2-dichloroethane was reported at a concentration of 2.3 ppb. No other identifiable compounds or UIPs were reported. The detection limits ranged from 2.0 ppb to 4.0 ppb. The average daily water usage during this period was 367 gallons per day. Note that the supply well for the Lukachina residence is shared with the Loutit residence.

#### 3.4 Whispering Pines Park Water Supply System

MTBE was reported at 49.8 ppb in the influent water sample collected from the Whispering Pines Park on January 22, 2002, which is in excess of the VHA for MTBE (40.0 ppb). No other identifiable compounds or UIPs were reported at concentrations above detection limits. The detection limits ranged from 0.5 ppb to 1.0 ppb. The average daily water usage during this period was 6,575 gallons per day.

#### 3.5 Treatment System Effectiveness

#### 3.5.1 Intermediate Treatment System Samples

Intermediate (midpoint) treatment system samples were collected from Alexander and Lukachina residences on January 22, 2002 and from the Loutit residence on January 28, 2002. The Whispering Pines Park water system does not have a midpoint sampling location. No petroleum-related VOCs were reported above detection limits in the sample from the Alexander residence. MTBE was detected in the samples collected from the Lukachina and Loutit samples, at concentrations of 1.8 and 41.1 ppb, respectively.

#### 3.5.2 Effluent Treatment System Samples

Effluent (treated) water samples were collected from the Alexander and Lukachina residences and the Whispering Pines Park on January 22, 2002, and from the Loutit residence on January 28, 2002. No petroleum-related VOCs were reported above detection limits in any of the effluent samples. The detection limits ranged from 0.5 ppb to 1.0 ppb.

The Whispering Pines Park effluent sample was reported to contain four non-petroleum VOCs at concentrations above detection limits. These include the following trihalomethane compounds: bromodichloromethane, bromoform, chloroform and dibromochloromethane. None of these compounds have established MCLs or VHAs. These three VOCs are considered to be by-products of chlorination water treatment and are not considered to be evidence of petroleum VOC breaking through the treatment system.



#### 3.6 Summary of Results

Table 1 below shows a summary of the results (influent, mid, effluent) of petroleum VOC concentrations from the First Quarter 2002 sampling event. Also shown in Table 1 are the average influent concentrations from 2001 (January, April, July, November).

TOTAL R	TER SUPPLY MO EPORTED PETRO EAST CLARE concentrations reporte	LEUM VOC CON NDON, VERMON	CENTRATIONS	2002
Location	Alexander	Loutit	Lukachina	Whispering Pines
Influent (1/02)	2.0	40.4	52.5	49.8
Mid (1/02)	ND	41.1	1.8	
Effluent (1/02)	ND	ND	ND	ND
Average 2001 Influent	33.3	69.9	68.6	89.7

#### Notes:

#### 4.0 CONCLUSIONS

Based on the data presented in Section 3.0 of this report, Griffin has reached the following conclusions.

- The petroleum compound MTBE was detected in the influent of all four water systems sampled on January 21 and 28, 2002. Excluding the Alexander system, the MTBE concentrations were above the VHA for this compound. Compared to average 2001 influent concentrations of MTBE, the January 2002 concentrations are lower in all cases, indicating a general decreasing trend in contaminant levels.
- 2. Low levels of 1,2 dichloroethane were detected in the influent from the Loutit and Lukachina systems sampled on January 21 and 28, 2002. In both cases, the concentrations were below the MCL for this compound. 1,2 dichloroethane has been detected in both of these systems, as well other systems in the area, during previous sampling events.
- 3. MTBE was detected in the midpoint samples from the Loutit and Lukachina systems sampled on January 21 and 28, 2002. While the presence of MTBE at the midpoint location has not compromised the health of the residents, it is an indication that the treatment systems need to be maintained.
- 4. No petroleum compounds were detected in any of the effluent samples collected from the four treatment systems that were sampled. The effluent from the Whispering Pines had low levels of trihalomethane compounds, assumed to be by-products of the chlorination system.

<sup>1)</sup> Results reported by Endyne, Inc., Williston, Vermont; reports dated February 11, 2002 (Appendix B)

<sup>2) &</sup>quot;ND" means that petroleum compounds were not reported above detection limits.

<sup>3) &</sup>quot;Total reported petroleum VOC concentrations" are calculated as the sum of the following compounds: BTEX, MTBE, trimethylbenzenes, and naphthalene.



#### 5.0 RECOMMENDATIONS

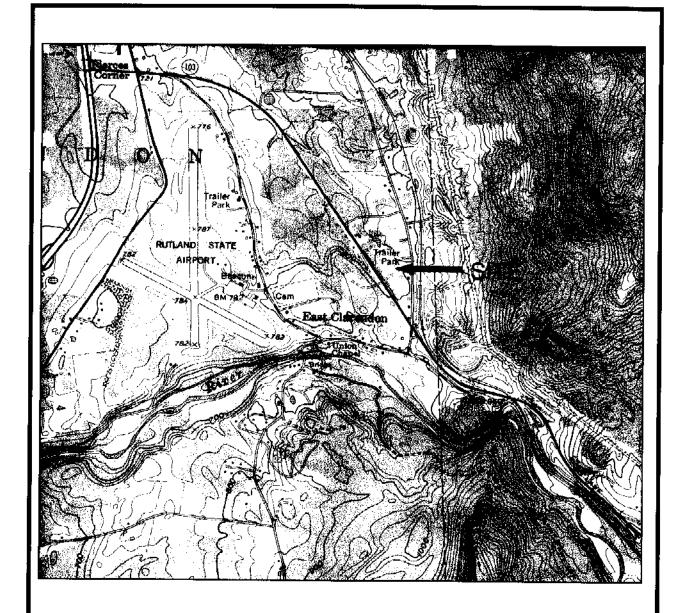
Griffin recommends continued quarterly monitoring of influent, midpoint and effluent (where applicable) of these four sampling locations, with continued water quality analysis by EPA Method 524.2. Brief reports will be prepared summarizing the results of each quarterly sampling event. A more detailed report with data evaluation will be prepared on an annual basis in conjunction with the full round of sampling.

In addition, Griffin recommends that Vermont Water Treatment (VWT) be alerted of the presence of MTBE in the midpoint samples from the Loutit and Lukachina residences so that the proper maintenance can be performed.



# APPENDIX A Maps

SITE LOCATION MAP AREA MAP



Griffin Job Number:

9924283 & 10924304

Source:

USGS Mapping Rutland 7.5' Quadrangle 1961, Revised 1998



# Former Jorgensen's Honda Clarendon General Store

Site Location Map USGS Mapping

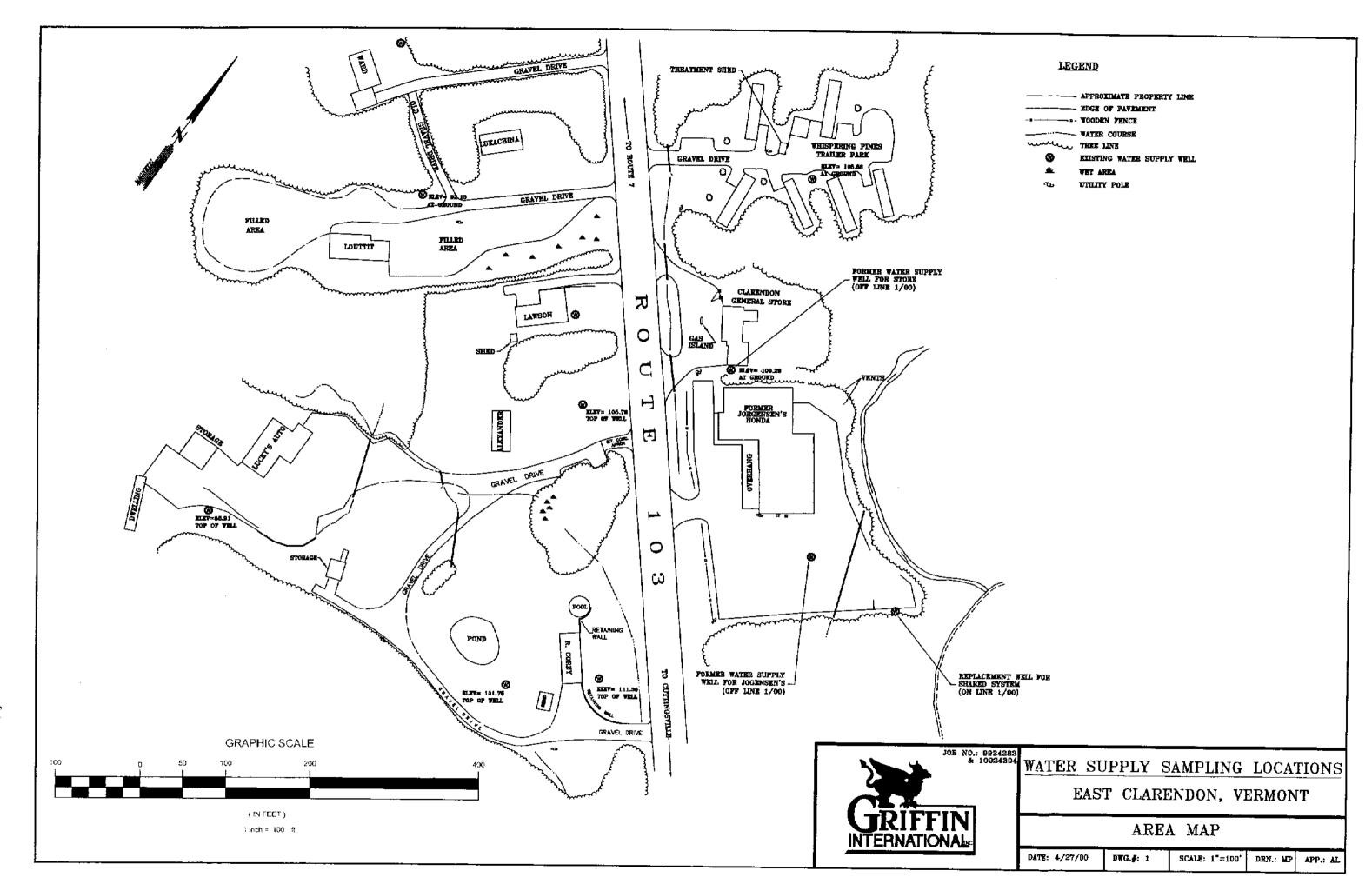
Date: 08/09/01

Drawing No.

Scale: 1:24,000

By:

MEW



LtDWGt4000 senest4200 senest4283t1X17MAP.



# APPENDIX B Water Quality Data

INFLUENT WATER QUALITY TABLES AND GRAPHS LABORATORY ANALYTICAL REPORTS



# Influent (untreated) Drinking Water Supply Monitoring Results Summary Alexander Residence East Clarendon, Vermont

" <del></del>	Date of Sa	ımple Colle	ction										
M602 PARAMETER	2/1/95	3/2/95	4/5/95	5/4/95	6/8/95	7/6/95	8/4/95	9/6/95	10/6/95	10/31/95	12/7/95	1/5/96	4/8/96
Benzene						· · · · · · · · · · · · · · · · · · ·			1	1		170700	77000
Toluene		1		· ·		<del></del>		<del> </del>	<del>i                                     </del>	<del> </del>	<u> </u>	<del> </del>	<del></del>
Ethylbenzene					<b>-</b>			<del>                                     </del>			·	<del>-</del>	
Xylenes						<del>-</del> -				-			
Chloroberizene					····	<del>                                     </del>				<del></del>		<del> </del> -	
1,2-DCB				·		<del></del> -		<del> </del>	·	<del></del>		<del> </del>	
1,3-DCB					-	<del> </del>							
1,4-DCB	<del>                                     </del>					<del>                                     </del>		<del> </del>	-		<u> </u>	<u> </u>	
MTBE	<del> </del>					<del></del>	-		-				
Total BTEX								<del></del>	<del></del>				<b></b>
BTEX+MTBE	69	58	79	62	65	88	64	43	58	47	86	66	4

	Date of \$a	imple Colle	ction					•					
M602 PARAMETER	7/12/96	10/29/96	1/14/97	4/30/97	7/21/97	10/7/97	1/14/98	4/17/98	7/21/98	10/6/98	1/20/99	4/5/99	8/2/99
Benzene									7721100	10,030	174.0750	40/86	
Toluene				<del></del>			-						TBQ <1
Ethylbenzene				<del>                                     </del>									ND <1
Xylenes	<del></del> -		-										ND <1
Chlorobenzene													ND <1
1,2-DCB	<del></del>			<del> </del>					_				ND <1
1,3-DCB				<del></del>							_		ND <1
1,4-DCB		_											ND <1
MTBE				-									ND <1
Total BTEX													36.4
													TBQ <1
BTEX+MTBE	69	58	67	67	_ 7B	60	64.9	50	58	38	50	100	36.4

	Date of Sa		ction								DW Standa	ards
PARAMETER	11/15/99	2/21/00	5/18/00	7/11/00	10/2/00	1/30/01	4/5/01	7/27/01	11/6/01	2/22/02	MCL	VHA
Benzene	ND<2.5	ND<1	ND<0.5	ND<0.5	ND<0.5		ND-2.5	ND<0.5	ND<0.5		5.0	
Toluene	ND<2.5	ND<1	ND<0.5	ND⊲0.5	ND<0.5	Not	ND<2.5	ND<0.5	ND<0.5		1,000.0	
Ethylbenzene	ND<2.5	ND<1	ND<0.5	ND<0.5	ND<0.5	Sampled			ND<0.5		700.0	
Xylenes	ND<5.0	ND<1	ND<1.0	ND<1.0			ND<5.0				10,000.0	
1,3,5-Trimelhylbenzene	ND<2.5	NO<1	ND<0.5	ND⊲0.5	ND<0.5		ND<2.5		ND<0.5			
1,2,4-Trimethylbenzene	ND<2.5	ND<1	ND<0.5				ND<2.5		ND<0.5			5.
Napthalene	ND<5.0	ND<1	ND<1.0	ND<1.0			ND<5.0		ND<1.0			4.
MTBE	39.9	34.8	53.0	54.6			<b>#61.</b>	39.2	7.7			20.
Total BTEX	ND	ND					ND	ND	NĎ			40.
Total Tesled VOCs	39.9	34.8	53.0				53.1	39.2	7.7		<del></del>	
Avg. Daily Water Use (gal)			50	59			51	50	45	2.0		

NOTES: EPA Method 602 used for laboratory analysis through 8/2/99

EPA Method 524.2 used for laboratory analysis 11/99 and after 5/00

EPA Method 8021b used for laboratory analysis 2/00

All values reported in ug/L (ppb).

TBQ<X - trace below quantilation limit X

ND < X - None Detected above a concentration of X.

Results reported above detection limits are indicated in bold

Results reported above MCLs or VHAs are shaded.

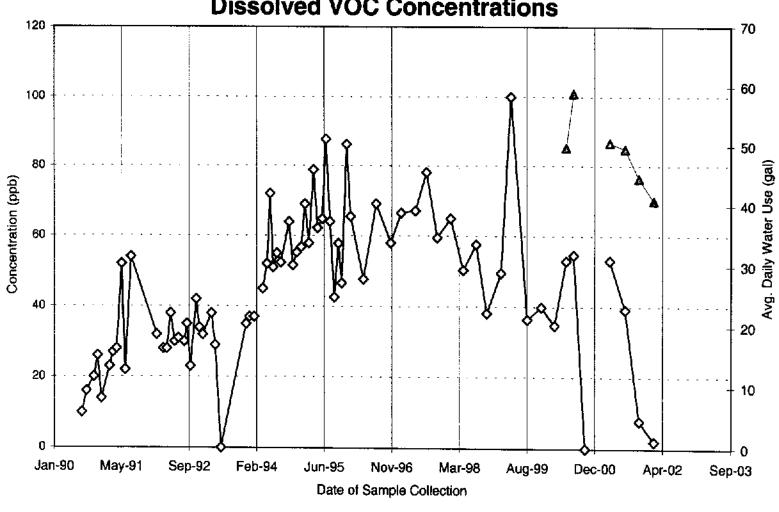
Influent water is treated via carbon absorption prior to delivery to point-of-use.

Drinking Water Standards are from "Vermont Department of Health, Drinking Water Guidance" December 1998.

--- means that no drinking water standard has been established for this parameter.



# Alexander Influent (untreated) from Supply Well Dissolved VOC Concentrations



→ Total Reported VOCs - Avg. Daily Water Use



#### Influent (untreated) Drinking Water Supply Monitoring Results Summary **Loutit Residence** East Clarendon, Vermont

	Date of Sc	imple Colle	ection					•			DW Stando	ards
PARAMETER	1/30/01	4/5/01	7/27/01	11/6/01	1/28/02	1					MCL	VHA
Benzene	ND<0.5	ND<2.5	ND<0.5		ND<0.5		<del>-</del>			•	5.0	
Toluene	ND<0.5	ND<2.5	ND<0.5		ND<0.5	···			<del></del>		1,000.0	
Ethylbenzene	ND<0.5	ND<2.5	ND<0.5	System	ND<0.5			<del></del>	<del></del>	-	700.0	
Xylenes	ND<1.0	ND<5.0			ND<1.0		<del>-  </del>		-		10,000.0	
1,3,5-Trimethylbenzene	ND<0.5	ND<2.5	ND<0.5	Sampled	ND<0.5		<del>                                     </del>	-	<del> </del>		10,000.0	5.0
1,2,4-Trimethylbenzene	ND<0.5	ND<2.5	ND<0.5		ND<0.5		<del></del>				<del> </del>	4,0
Naphthalene	ND<1.0	ND<5.0	ND<1.0		ND<1.0		<del></del>		<del>                                     </del>	<del>-</del>	1	20.0
1,2 Dichloroethane			4.3		1.6				1		5.0	20.0
Trihalomethanes			4.3		2.8		<u> </u>	<del></del>		•	5.0	
MTBE	76.5	59.2	73.9		40.4	<del>-   -</del>			1		<del>   </del>	40.0
Total BTEX	ND	ND	ND		ND				<del>                                     </del>		1	40.0
Total Tested VOCs	76.5	59.2	82.5		44.8		<del>-</del>	<del></del>	<del>                                     </del>	·	<del>   </del>	
Average Water Usage (Gal/day)	1	130.8	321.8		366.9	<del>-  </del>	<del>'                                     </del>		<del>                                     </del>		╁╌	

EPA Method 524.2 used for laboratory analysis

All values reported in ug/L (ppb).

TBQ<X - trace below quantitation limit X

ND < X - None Detected above a concentration of X.

Results reported above detection limits are indicated in bold

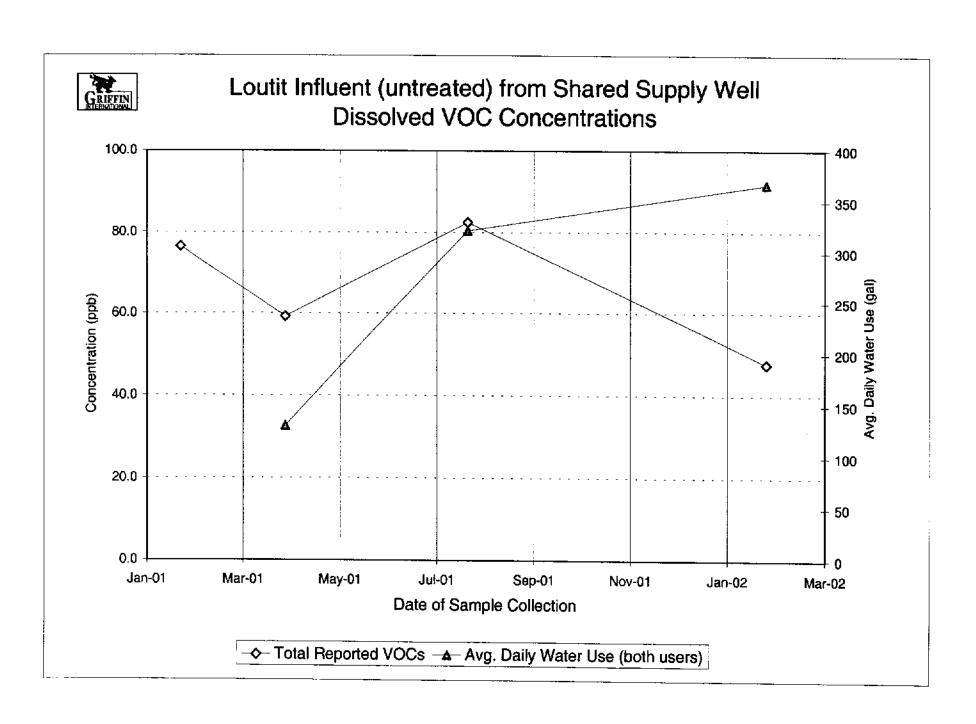
Results reported above MCLs or VHAs are shaded.

Influent water is treated via carbon absorption prior to delivery to point-of-use.

Drinking Water Standards are from "Vermont Department of Health, Drinking Water Guidance" December 1998.

--- means that no drinking water standard has been established for this parameter.

Average Water Use is the sum of the individual water use of both users of this shared well.





# Influent (untreated) Drinking Water Supply Monitoring Results Summary Lukachina Residence East Clarendon, Vermont

	Date of San	nple Collecti	on				•						
M602 PARAMETER	12/16/93	1/20/94	2/15/94	3/25/94	4/25/94	5/19/94	6/9/94	7/8/94	8/5/94	9/9/94	10/6/94	11/3/94	12/1/94
Benzene			i				i -					******	127 17 1
Toluene							i e		1	<b>.</b>		t	
Ethylbenzene									· · · · · · · · · · · · · · · · · · ·				
Xylenes			"										
Chlorobenzene									<del>i                                     </del>				
1,2-DCB	1		1				<u> </u>			<b>T</b>			
1,3-DCB			† <del></del>						1				
1,4-DCB			! ····	-			<u> </u>	<del>-</del>	<del>                                     </del>	<del>                                     </del>	<del></del>	<del>                                     </del>	
MTBE										<del>                                     </del>	<del> </del>		
Total BTEX	1							<del></del>				<del> </del>	
BTEX+MTBE	61	50	57	51	42	83	39	39	58	45	49	48	4

<del></del>	Date of Sai	mple Collecti	an										
M602 PARAMETER	1/4/95	2/1/95	5/4/95	6/8/95	7/6/95	8/4/95	12/7/95			1	1	1	
Benzena			i	·	· · · · · · · · · · · · · · · · · · ·				<del></del>	<del>                                     </del>	<del>                                     </del>	<del>                                     </del>	<del>                                     </del>
Toluene		1			1	<del></del>			<del>†                                      </del>	<del> </del>	+	<del> </del> -	<del> </del>
Ethylbenzene			i -	· · · · · · · · · · · · · · · · · · ·	<u> </u>	<del>                                     </del>		<del>                                     </del>	<del>-  </del>	<del>                                     </del>	<del></del>	+	<del> </del>
Xylenes		1		i		<u> </u>	<del></del>	·	<del>                                     </del>		<del>                                     </del>	<del> </del>	<del>                                     </del>
Chlorobenzene					!		1		+	<del> </del>	+	· · · · · · · · · · · · · · · · · · ·	+
1,2-DCB 1,3-DCB			1		1				+	<del>                                     </del>	<del>-  </del>	<del> </del>	+
1,3-DCB		· · · · ·	<del></del>			<del>-</del>		<del>                                     </del>		<del>                                     </del>	<del> </del>	1	<del>                                     </del>
1,4-DCB		1					<del> </del>	· · · · · ·	<del> </del>		<del> </del>	+	+
MTBE							!		<del> </del>	<del>                                     </del>	<del> </del>	<del></del>	<del>                                     </del>
Total BTEX		<del>                                     </del>					<del></del>		+	<del> </del>	+	<del>                                     </del>	+
BTEX+MTBE	48	49	48	55	61	55	72	<del></del>	<del> </del>	<del>                                     </del>	<del> </del>		<del> </del>

	Date of San	ple Collection	DIA .							DW Standar	ds
M524.1 PARAMETER	11/15/99	10/2/00	1/30/01	4/5/01	7/27/01	11/6/01	2/22/02	 T T		MCL	VHA
Benzene	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	ND<0.5	ND<0.5		<del></del>	5.0	7111
Toluene	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	ND<0.5	ND<0.5	 <del></del>	<del>                                     </del>	1,000.0	
Ethylbenzene	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	ND<0.5	ND<0.5	 	<del>                                     </del>	700.0	
Xylenes	ND<1.0	ND<1.0	ND<1.0	ND<10.	ND<1.0		ND<1.0	 <del>-  </del>	<del>-</del> +	10,000.0	
1,3,5-Trimethylbenzene	ND<0.5	ND<0.5	ND<0.5	ND<5.0	ND<0.5	ND<0.5	ND<0.5		<del></del> -	10,000.0	5.
1,2,4-Trimethylbenzene	ND<0.5	ND<0.5	ND<0.5	ND<5.0	NO<0.5		ND<0.5	 	_		4.
Naphthalene	ND<1.0	ND<1.0	ND<1.0	ND<10.0	ND<1.0	ND<1.0	ND<1.0		<del> </del>	<del> </del>	20.
1,2-Dichloroethane			-		3.6	1.8	2.3	 <del></del>	<del></del>	5.0	20.
Trihalomethanes				-	4.4	6.7	ND	 	+		
MTBE	71.1	9 63.7	74.5	823	( ) ( ) ( ) ( )	- 82	3.05	 <del></del>	<del></del>	<del>  -:::  </del>	40.
Total BTEX	ND	ND.	ND	NO		ND	ND	 		<del>                                     </del>	40.
Total Tested VOCs	71.1	53.7	74.5	82.3	79.3	54.7	54.8	 <del></del>		<del>                                     </del>	
Average Water Usage (Gal/day)		7.0		130.8		321.2	365.9	 <del> </del>	<del></del>	<del>                                     </del>	

NOTES: EPA Method 602 used for laboratory analysis through 1995

EPA Method 524.2 used for laboratory analysis 11/99 and after

All values reported in ug/L (ppb).

TBQ<X - trace below quantitation limit X

ND < X - None Detected above a concentration of X.

Results reported above detection limits are indicated in bold

Results reported above MCLs or VHAs are shaded.

Influent water is treated via carbon absorption prior to delivery to point-of-use.

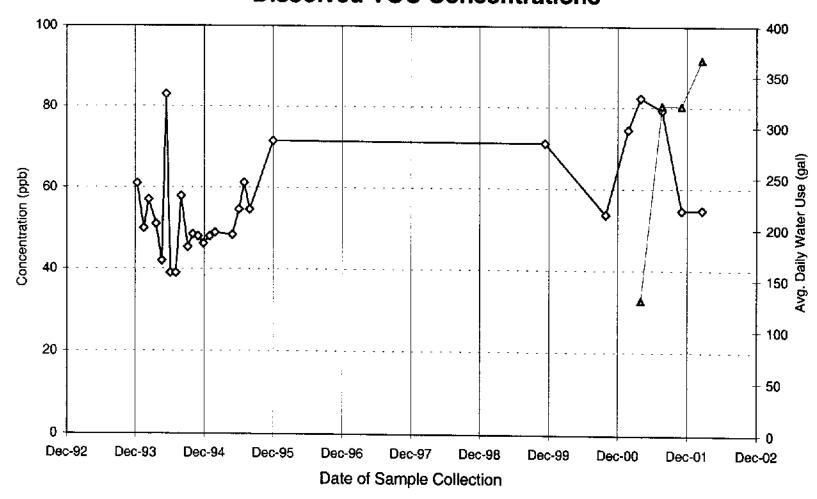
Drinking Water Standards are from "Vermont Department of Health, Drinking Water Guidance" December 1998.

--- means that no drinking water standard has been established for this parameter.

Average Water Use is the sum of the individual water use of both users of this shared well.



# Lukachina Influent (untreated) from Shared Supply Well Dissolved VOC Concentrations



→ Total Reported VOCs → Avg. Daily Water Use (both users)



# Influent (untreated) Drinking Water Supply Monitoring Results Summary Whispering Pines Park East Clarendon, Vermont

	Date of Sa	mple Colle	ction									
PARAMETER	10/29/96	1/14/97	4/30/97	7/21/97	10/7/97	1/14/98	4/17/98	7/21/98	10/6/98	1/20/99	4/5/99	8/2/99
Benzene										<u> </u>		2.6
Toluene												ND 4
Ethylbenzene										···-		ND 4
Xylenes							· ·		†			ND <
Chlorobenzene						_						ND <2
t,2-DCB												ND <
1,3-DCB												ND <
1,4-DCB										<del> </del>		ND &
MTBE												181
Total BTEX												2.6
BTEX+MTBE	1	178	150	209	174	73	46	123	154	147	130	

	Date of Sa	mple Collec	ction				•				DW Standa	ards
	11/15/99	12/20/99	1/14/00	1/28/00	2/7/00	3/31/00	5/18/00	7/11/00	10/2/00	1/30/01		
PARAMETER	M524.2	M8021B	M524.2	M524.2	M524.2	M524.2	M524.2	M524.2	M524.2	M524.2	MCL	VHA
Benzene	ND<2.5		* EE 947	4502151	# 2 Y C T	22.06	4.5	52 54				4101
Toluene	ND<2.5	ND<2										<del></del>
Elhylbenzene	ND<2.5	ND<2	ND<5.0	ND<5.0	ND<5.0	ND<0.5					.,	
Xylenes	ND<5.0	ND<2	ND<10.0	ND<10.0	ND<10.0	ND<1.0						
1,3,5-trimethy/benzene	ND<2.5	4.3	ND<5.0	ND<5.0	ND<5.0							5.0
1,2,4-trimethy/benzene	ND<2.5	TBQ<2	ND<5.0	ND<5.0	ND<5.0	ND<0.5						4.0
Naphthalene	ND<5.0	TBQ<2	ND<10.0	ND<10.0	ND<10.0	ND<1.0						20.0
MTBE		E 12		<b>始深</b>		MARKET FEE		STATE OF THE		W. 3402		40.0
Total BTEX	NĎ	47.7	14.7	15.1	12.0		4.5					70.0
Total Reported VOCs	171.	194.	148.		187.	123.	113.					
Average Water Usage (Gal/day)			1988	4465		,,,,,,	5349		4639	3823	- <del></del>	

	Date of Sa	mple Colle	ction			DW Standa	ards
	4/5/01	7/27/01	11/6/01	2/22/02			
PARAMETER	M524.2	M524.2	M524.2	M524.2		MCL	VHA
Benzene	ND<5.0	ND<0.5	2.6	ND<0.5		5.0	77113
Toluene	ND<5.0	ND<0.5	ND<0.5	ND<0.5		1,000.0	
Ethylbenzene	ND<5.0	ND<0.5	ND<0.5	ND<0.5		700.0	
Xylenes	ND<10.0	ND<1.0	ND<1.0	ÑD<1.0		10,000.0	*
1,3,5-trirnethylbenzene	ND<5.0	ND<0.5	ND<0.5	ND<0.5	···   ···	10,000.0	5.0
1,2,4-trimethylbenzene	ND<5.0	ND<0.5	ND<0.5		<del> </del>	<del>                                     </del>	4.0
Naphthalene	ND<10.0	ND<1.0	ND<1.0		<del>-     </del>	<del>                                     </del>	20.0
MTBE	<b>111.</b>	W2570		40.0	<del>-          </del>	<del>                                     </del>	40.0
Total BTEX	ND						40.0
Total Reported VOCs	114.	76.6			<del>-                                 </del>	<del>     </del> -	
Average Water Usage (Gai/day)	4635	4210			<del></del>	<del>   </del>	

EPA Method 602 used for laboratory analysis through August 1999

EPA Method 524.2 used for laboratory analysis on November 15, 1999 and on and after January 14, 2000

All of the compounds included in the M524.2 test that have been reported above detection limits in samples from this well, are included in these tables. All values reported in ug/L (ppb).

TBQ<X - trace below quantitation limit X

ND < X - None Detected above a concentration of X.

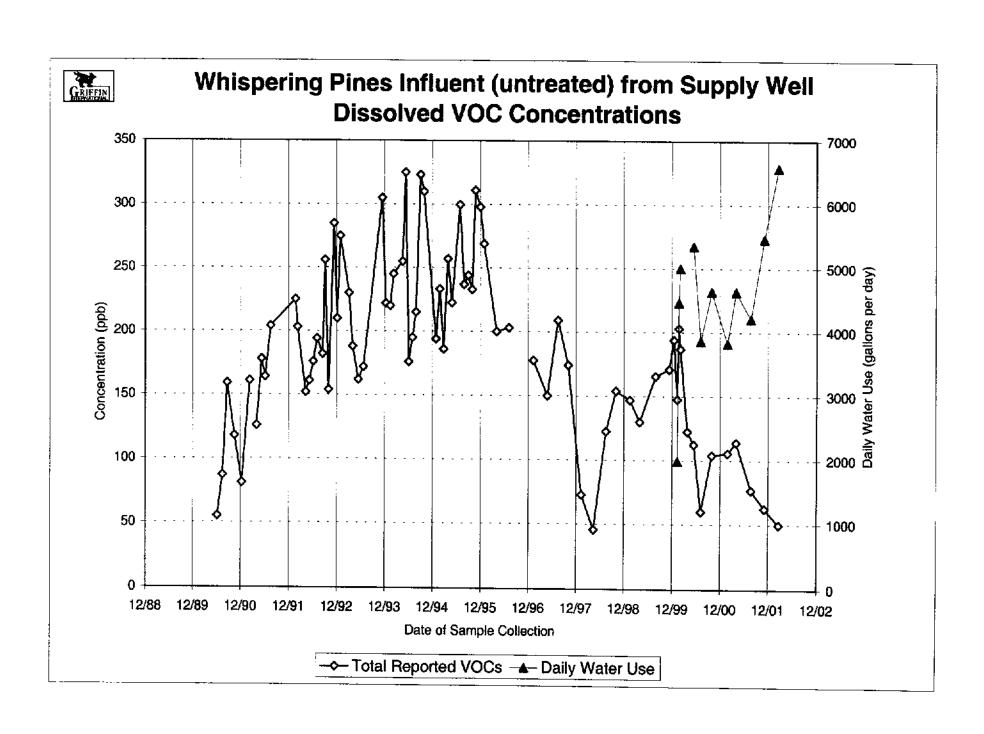
Results reported above detection limits are indicated in bold

Results reported above MCLs or VHAs are shaded.

Influent water is treated via air stripper prior to delivery to point-of-use.

Drinking Water Standards are from "Vermont Department of Health, Drinking Water Guidance" December 1998.

--- means that no drinking water standard has been established for this parameter.





160 James Brown Drive Williston, Vermont 05495 (802) 879-4333 FAX 879-7103

#### LABORATORY REPORT

Griffin International

PO Box 943

Williston, VT 05495

Attn: Miles Waite

PROJECT: 9924283/10924304

ORDER ID: 16228

RECEIVE DATE: January 29, 2002

REPORT DATE: February 12, 2002

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. Different groups of analyses may be reported under separate cover.

All samples were prepared and analyzed by requirements outlined in the referenced methods and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced methods.

Blank contamination was not observed at levels affecting the analytical results.

Analytical method precision and accuracy was monitored by laboratory control standards which include matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits, unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D. Laboratory Director

May

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160 James Brown Drive Williston, Vermont 05495 (802) 879-4333 FAX 879-7103

# LABORATORY REPORT

EPA 524.2

CLIENT: Griffin International PROJECT: 9924283/10924304

SITE: Loutit Influent

DATE RECEIVED: January 29, 2002 REPORT DATE: February 12, 2002

ANALYSIS DATE: February 6, 2002

ORDER ID: 16228

REFERENCE NUMBER: 187563 DATE SAMPLED: January 28, 2002

TIME SAMPLED: 12:28 PM

	Result		Result
<u>Parameter</u>	${ m ng/L}$	<u>Parameter</u>	ug/L
Benzene	< 0.5	Hexachlorobutadiene	< 0.5
Bromobenzene	< 0.5	Isopropylbenzene	< 0.5
Bromochloromethane	< 0.5	4-Isopropyltoluene	< 0.5
Bromomethane	< 0.5	MTBE	40.4
n-Butylbenzene	< 0.5	Naphthalene	< 1.0
sec-Butylbenzene	< 0.5	n-Propylbenzene	< 0.5
tert-Butylbenzene	< 0.5	Styrene	< 0.5
Carbon tetrachloride	< 0.5	1,1,1,2-Tetrachloroethane	< 0.5
Chlorobenzene	< 0.5	1,1,2,2-Tetrachloroethane	< 1.0
Chloroethane	< 0.5	Tetrachloroethene	< 0.5
Chloromethane	< 0.5	Toluene	< 0.5
2-Chlorotoluene	< 1.0	1,2,3-Trichlorobenzene	< 0.5
4-Chlorotoluene	< 1.0	1,2,4-Trichlorobenzene	< 0.5
Dibromomethane	< 1.0	1,1,1-Trichloroethane	< 0.5
1,2-Dichlorobenzene	< 0.5	1,1,2-Trichloroethane	< 0.5
1,3-Dichlorobenzene	< 0.5	Trichloroethene	< 0.5
1,4-Diehlorobenzene	< 0.5	Trichlorofluoromethane	< 1.0
Dichlorodifluoromethane	< 0.5	1,2,3-Trichloropropune	< 0.5
1,1-Dichloroethane	< 0.5	1,2,4-Trimethylbenzene	< 0.5
1,2-Dichloroethane	1.6	1,3,5-Trimethylbenzene	< 0.5
1,1-Dichloroethene	< 0.5	Vinyl Chloride	< 0.5
cis-1,2-Dichloroethene	< 0.5	Xylenes, Total	< 1.0
trans-1,2-Dichloroethene	< 0.5	Bromodichloromethane	0.6
Dichloromethane	< 1.0	Bromoform	0.9
1,2-Dichloropropane	< 0.5	Chloroform	< 0.5
1,3-Dichloropropane	< 0.5	Dibromochloromethane	1.3
2,2-Dichloropropane	< 0.5	Total Trihalomethanes	2.8
1,1-Dichloropropene	< 0.5	Surrogate 1	91.%
cis-1,3-Dichloropropene	< 0.5	Surrogate 2	83.%
trans-1,3-Dichloropropene	< 0.5	UIP's	0.
Ethylbenzene	< 0.5		



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# LABORATORY REPORT EPA 524.2

CLIENT: Griffin International PROJECT: 9924283/10924304

SITE: Loutit Midpoint

DATE RECEIVED: January 29, 2002 REPORT DATE: February 12, 2002

ANALYSIS DATE: February 6, 2002

ORDER ID: 16228

REFERENCE NUMBER: 187564 DATE SAMPLED: January 28, 2002

TIME SAMPLED: 12:27 PM

	Result		Result
<u>Parameter</u>	$\underline{\mathtt{ug}}/\underline{\mathtt{L}}$	<u>Parameter</u>	ug/L
Benzene	< 0.5	Hexachlorobutadiene	< 0.5
Bromobenzene	< 0.5	Isopropylbenzene	< 0.5
Bromochloromethane	< 0.5	4-Isopropyltoluene	< 0.5
Bromomethane	< 0.5	MTBE	41.1
n-Butylhenzene	< 0.5	Naphthalene	< 1.0
sec-Butylbenzene	< 0.5	n-Propylbenzene	< 0.5
tert-Butylbenzene	< 0.5	Styrene	< 0.5
Carbon tetrachloride	< 0.5	1,1,1,2-Tetrachloroethanc	< 0.5
Chlorobenzene	< 0.5	1,1,2,2-Tetrachloroethane	< 1.0
Chloroethane	< 0.5	Tetrachloroethene	< 0.5
Chloromethane	< 0.5	Toluene	< 0.5
2-Chlorotoluene	< 1.0	1,2,3-Trichlorobenzene	< 0.5
4-Chlorotoluene	< 1.0	1,2,4-Trichlorobenzene	< 0.5
Dibromomethane	< 1.0	1,1,1-Trichloroethane	< 0.5
1,2-Dichlorobenzene	< 0.5	1,1,2-Trichloroethane	< 0.5
1,3-Dichlorobenzene	< 0.5	Trichloroethene	< 0.5
1,4-Dichlorobenzene	< 0.5	Trichlorofluoromethane	< 1.0
Dichlorodifluoromethane	< 0.5	1,2,3-Trichloropropane	< 0.5
1,1-Dichloroethane	< 0.5	1,2,4-Trimethylbenzene	< 0.5
1,2-Dichloroethane	< 0.5	1,3,5-Trimethylbenzene	< 0.5
1,1-Dichloroethene	< 0.5	Vinyl Chloride	< 0.5
cis-1,2-Dichloroethene	< 0.5	Xylenes, Total	< 1.0
trans-1,2-Dichloroethene	< 0.5	Bromodichloromethane	< 0.5
Dichloromethane	< 1.0	Bromoform	< 0.5
1,2-Dichloropropane	< 0.5	Chloroform	< 0.5
1,3-Dichloropropane	< 0.5	Dibromochloromethane	< 0.5
2,2-Dichloropropane	< 0.5	Total Trihalomethanes	< 0.5
1,1-Dichloropropene	< 0.5	Surrogate 1	92.%
cis-1,3-Dichloropropene	< 0.5	Surrogate 2	83.%
trans-1,3-Dichloropropene	< 0.5	UIP's	0.
Ethylbenzene	< 0.5		



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### LABORATORY REPORT EPA 524.2

CLIENT: Griffin International PROJECT: 9924283/10924304

SITE: Loutit Effluent

DATE RECEIVED: January 29, 2002 REPORT DATE: February 12, 2002

ANALYSIS DATE: February 6, 2002

ORDER ID: 16228

REFERENCE NUMBER: 187565 DATE SAMPLED: January 28, 2002

TIME SAMPLED: 12:26 PM

	Result		Result
<u>Parameter</u>	$\underline{\mathbf{ug}}/\underline{\mathbf{L}}$	<u>Parameter</u>	ng/L
Вепzепе	< 0.5	Hexachlorobutadiene	< 0.5
Bromobenzene	< 0.5	Isopropylbenzene	< 0.5
Bromochloromethane	< 0.5	4-Isopropyltoluene	< 0.5
Bromomethane	< 0.5	MTBE	< 1.0
n-Butylbenzene	< ().5	Naphthalene	< 1.0
sec-Butylbenzene	< 0.5	n-Propylbenzene	< 0.5
tert-Butylbenzene	< 0.5	Styrene	< 0.5
Carbon tetrachloride	< 0.5	1,1,1,2-Tetrachloroethane	< 0.5
Chlorobenzene	< 0.5	1,1,2,2-Tetrachloroethane	< 1.0
Chloroethane	< 0.5	Tetrachloroethene	< 0.5
Chloromethane	< 0.5	Toluene	< 0.5
2-Chlorotoluene	< 1.0	1,2,3-Trichlorobenzene	< 0.5
4-Chlorotoluene	< 1.0	1,2,4-Trichlorobenzene	< 0.5
Dibromomethane	< 1.()	1,1,1-Trichloroethane	< 0.5
1,2-Dichlorobenzene	< 0.5	1,1,2-Trichloroethane	< 0.5
1,3-Dichtorobenzene	< 0.5	Trichloroethene	< 0.5
1,4-Dichlorobenzene	< 0.5	Trichlorofluoromethane	< 1.0
Dichlorodifluoromethane	< 0.5	1,2,3-Trichloropropane	< 0.5
1,1-Dichloroethane	< 0.5	1,2,4-Trimethylbenzene	< 0.5
1,2-Dichloroethane	< 0.5	1,3,5-Trimethylbenzene	< 0.5
1,1-Dichloroethene	< 0.5	Vinyl Chloride	< 0.5
cis-1,2-Dichloroethene	< 0.5	Xylenes, Total	< 1.0
trans-1,2-Dichloroethene	< 0.5	Bromodichloromethane	< 0.5
Dichloromethane	< 1.0	Bromoform	< 0.5
1,2-Dichloropropane	< 0.5	Chloroform	< 0.5
1,3-Dichloropropane	< 0.5	Dibromochloromethane	≤ 0.5
2,2-Dichloropropane	< 0.5	Total Trihalomethanes	< 0.5
1,1-Dichloropropene	< 0.5	Surrogate 1	91.%
cis-1,3-Dichloropropene	< 0.5	Surrogate 2	84.%
trans-1,3-Dichloropropene	< 0.5	UIP's	0.
Ethylbenzene	< 0.5		

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160 James Brown Drive Williston, Vermont 05495 (802) 879-4333

<u> </u>	(802) 879-4333 Special Reporting Instructions:																	
Pr	Project Name: Clorendon Gen. Store/Jorgy Hordt Reporting Address: 61 Billing Address: 61																	
(	Clarendon V-I.																	
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#### LABORATORY REPORT

Griffin International

PO Box 943

Williston, VT 05495

Attn: Miles Waite

PROJECT: Clarendon Gen. Store/10924304

ORDER ID: 16148

RECEIVE DATE: January 23, 2002

REPORT DATE: February 12, 2002

Enclosed please find the results of the analyses performed for the samples referenced on the attached chain of custody. Different groups of analyses may be reported under separate cover.

All samples were prepared and analyzed by requirements outlined in the referenced methods and within the specified holding times.

All instrumentation was calibrated with the appropriate frequency and verified by the requirements outlined in the referenced methods.

Blank contamination was not observed at levels affecting the analytical results.

Man

Analytical method precision and accuracy was monitored by laboratory control standards which include matrix spike, duplicate and quality control analyses. These standards were determined to be within established laboratory method acceptance limits, unless otherwise noted.

Reviewed by,

Harry B. Locker, Ph.D. Laboratory Director

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### LABORATORY REPORT EPA 524.2

CLIENT: Griffin International

PROJECT: Clarendon Gen. Store/10924304

SITE: Alexander Inf

DATE RECEIVED: January 23, 2002 REPORT DATE: February 12, 2002

ANALYSIS DATE: January 25, 2002

ORDER ID: 16148

REFERENCE NUMBER: 187313 DATE SAMPLED: January 22, 2002

TIME SAMPLED: 10:19 AM

	Result		Result
<u>Parameter</u>	<u>ug/L</u>	<u>Parameter</u>	ug/L
Benzene	< 0.5	Hexachlorobutadiene	< 0.5
Bromohenzene	< 0.5	Isopropylbenzene	< 0.5
Bromochloromethane	< 0.5	4-Isopropyltoluene	< 0.5
Bromomethane	< 0.5	MTBE	2.0
n-Butylbenzene	< 0.5	Naphthalene	< 1.0
sec-Butylbenzene	< 0.5	n-Propylhenzene	< 0.5
tert-Butylbenzene	< 0.5	Styrene	< 0.5
Carbon tetrachloride	< 0.5	1,1,1,2-Tetrachloroethane	< 0.5
Chłorobenzene	< 0.5	1,1,2,2-Tetrachlorocthane	< 1.0
Chloroethane	< 0.5	Tetrachloroethene	< 0.5
Chloromethane	< 0.5	Toluene	< 0.5
4-Chlorotoluene	< 1.0	1,2,3-Trichlorobenzene	< 0.5
2-Chlorotoluene	< 1.0	1,2,4-Trichlorobenzene	< 0.5
Dibromomethane	< 1.0	1,1,1-Trichtoroethane	< 0.5
1,2-Dichlorobenzene	< 0.5	1,1,2-Trichloroethane	< 0.5
1,3-Dichlorobenzene	< 0.5	Trichloroethene	< 0.5
1,4-Dichlorobenzene	< 0.5	Trichlorofluoromethane	< 1.0
Dichlorodifluoromethane	< 0.5	1,2,3-Trichloropropane	< 0.5
l,1-Dichloroethane	< 0.5	1,2,4-Trimethylbenzene	< 0.5
1,2-Dichloroethane	< 0.5	1,3,5-Trimethylbenzene	< 0.5
1,1-Dichloroethene	< 0.5	Vinyl Chloride	< 0.5
eis-1,2-Dichloroethene	< 0.5	Xylenes, Total	< 1.0
trans-1,2-Dichloroethene	< 0.5	Bromodichloromethane	< 0.5
Dichloromethane	< 1.0	Bromoform	< 0.5
1,2-Dichloropropane	< 0.5	Chloroform	< 0.5
1,3-Dichloropropane	< 0.5	Dibromochloromethane	< 0.5
2,2-Dichloropropane	< 0.5	Total Tribalomethanes	< 0.5
l,1-Dichloropropene	< 0.5	Surrogate 1	91.%
cis-1,3-Dichloropropene	< 0.5	Surrogate 2	91.%
trans-1,3-Dichloropropene	< 0.5	UIP's	0.
Ethylbenzene	< 0.5		



160 James Brown Drive Williston, Vermont 05495 (802) 879-4333 FAX 879-7103

## LABORATORY REPORT EPA 524.2

CLIENT: Griffin International

PROJECT: Clarendon Gen. Store/10924304

SITE: Alexander Mid

DATE RECEIVED: January 23, 2002

REPORT DATE: February 12, 2002 ANALYSIS DATE: January 25, 2002 ORDER ID: 16148

REFERENCE NUMBER: 187314 DATE SAMPLED: January 22, 2002

TIME SAMPLED: 10:22 AM

	Result		Result
<u>Parameter</u>	<del>па</del> /Г	<u>Parameter</u>	ug/L
Benzene	< 0.5	Hexachlorobutadiene	< 0.5
Bromobenzene	< 0.5	Isopropylbenzene	< 0.5
Bromochloromethane	< 0.5	4-Isopropyltoluene	< 0.5
Bromomethane	< 0.5	MTBE	< 1.0
n-Butylbenzene	< 0.5	Naphthalene	< 1.0
sec-Butylbenzene	< 0.5	n-Propylbenzene	< 0.5
tert-Butylbenzene	< 0.5	Styrene	< 0.5
Carbon tetrachloride	< 0.5	1,1,1,2-Tetrachloroethane	< 0.5
Chlorobenzene	< 0.5	1,1,2,2-Tetrachlorocthanc	< 1.0
Chloroethane	< 0.5	Tetrachloroethene	< 0.5
Chloromethane	< 0.5	Toluene	< 0.5
4-Chlorotoluene	< 1.0	1,2,3-Trichlorobenzene	< 0.5
2-Chlorotoluene	< 1.0	1,2,4-Trichlorobenzene	< 0.5
Dibromomethane	< 1.0	1,1,1-Trichlorocthane	< 0.5
1,2-Dichlorobenzene	< 0.5	1,1,2-Trichloroethane	< 0.5
1,3-Dichlorobenzene	< 0.5	Trichloroethene	< 0.5
1,4-Dichlorobenzene	< 0.5	Trichlorofluoromethane	< 1.0
Dichlorodifluoromethane	< 0.5	1,2,3-Trichloropropane	< 0.5
1,1-Dichloroethane	< 0.5	1,2,4-Trimethylbenzene	< 0.5
1,2-Dichloroethane	< 0.5	1,3,5-Trimethylbenzene	< 0.5
1,1-Dichloroethene	< 0.5	Vinyl Chloride	< 0.5
cis-1,2-Dichloroethene	< 0.5	Xylenes, Total	< 1.0
trans-1,2-Dichloroethene	< 0.5	Bromodichloromethane	< 0.5
Dichloromethane	< 1.0	Bromoform	< 0.5
1,2-Dichloropropane	< 0.5	Chloroform	< 0.5
1,3-Dichloropropane	< 0.5	Dibromochloromethane	< 0.5
2,2-Dichloropropane	< 0.5	Total Trihalomethanes	< 0.5
1,1-Dichloropropene	< 0.5	Surrogate I	95.%
cis-1,3-Dichloropropene	< 0.5	Surrogate 2	88.%
trans-1,3-Dichloropropene	< 0.5	UIP's	0.
Ethylbenzene	< 0.5		



160 James Brown Drive Williston, Vermont 05495 (802) 879-4333 FAX 879-7103

### LABORATORY REPORT EPA 524.2

CLIENT: Griffin International

PROJECT: Clarendon Gen. Store/10924304

SITE: Alexander Eff

DATE RECEIVED: January 23, 2002 REPORT DATE: February 12, 2002

ANALYSIS DATE: January 25, 2002

ORDER ID: 16148

REFERENCE NUMBER: 187315 DATE SAMPLED: January 22, 2002

TIME SAMPLED: 10:23 AM

	Result		Result
<u>Parameter</u>	<u>ug/L</u>	<u>Parameter</u>	<u>ug/L</u>
Benzene	< 0.5	Hexachlorobutadiene	< 0.5
Bromobenzene	< 0.5	Isopropylbenzene	< 0.5
Bromochloromethane	< 0.5	4-Isopropyltoluene	< 0.5
Bromomethane	< 0.5	МТВЕ	< 1.0
п-Butylbenzene	< 0.5	Naphthalene	< 1.0
sec-Butylbenzene	< 0.5	n-Propylbenzene	< 0.5
tert-Butylhenzene	< 0.5	Styrene	< 0.5
Carbon tetrachloride	< 0.5	1,1,1,2-Tetrachloroethanc	< 0.5
Chlorobenzene	< 0.5	1,1,2,2-Tetrachloroethane	< 1.0
Chlorocthane	< 0.5	Tetrachloroethene	< 0.5
Chloromethane	< 0.5	Toluene	< 0.5
4-Chlorotoluene	< 1.0	1,2,3-Trichlorobenzene	< 0.5
2-Chlorotoluene	< 1.0	1,2,4-Trichlorobenzene	< 0.5
Dibromomethane	< 1.0	1,1,1-Trichloroethane	< 0.5
1,2-Dichlorobenzene	< 0.5	1,1,2-Trichloroethane	< 0.5
1,3-Dichlorobenzene	< 0.5	Trichloroethene	< 0.5
1,4-Dichlorobenzene	< 0.5	Trichlorofluoromethane	< 1.0
Dichlorodifluoromethane	< 0.5	1,2,3-Trichloropropane	< 0.5
1,1-Dichloroethane	< 0.5	1,2,4-Trimethylbenzene	< 0.5
1,2-Dichloroethane	< 0.5	1,3,5-Trimethylbenzene	< 0.5
1,1-Dichloroethene	< 0.5	Vinyl Chloride	< 0.5
cis-1,2-Dichloroethene	< 0.5	Xylenes, Total	< 1.0
trans-1,2-Dichloroethene	< 0.5	Bromodichloromethane	< 0.5
Dichloromethane	< 1.0	Вготобогт	< 0.5
1,2-Dichloropropane	< 0.5	Chloroform	< 0.5
1,3-Dichloropropane	< 0.5	Dibromochloromethane	< 0.5
2,2-Dichloropropane	< 0.5	Total Trihalomethanes	< 0.5
1,1-Dichloropropene	< 0.5	Surrogate 1	95.%
cis-1,3-Dichloropropene	< 0.5	Surrogate 2	90.%
trans-1,3-Dichloropropene	< 0.5	UIP's	0.
Ethylbenzene	< 0.5		



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## LABORATORY REPORT EPA 524.2

CLIENT: Griffin International

PROJECT: Clarendon Gen. Store/10924304

SITE: Lakachina Inf

DATE RECEIVED: January 23, 2002 REPORT DATE: February 12, 2002

ANALYSIS DATE: January 25, 2002

ORDER ID: 16148

REFERENCE NUMBER: 187316 DATE SAMPLED: January 22, 2002

TIME SAMPLED: 10:40 AM

	Result		Result
<u>Parameter</u>	<u>ug/L</u> ,	<u>Parameter</u>	<u>ue/L</u>
Benzene	< 2.0	Hexachlorobutadiene	< 2.0
Bromobenzene	< 2.0	Isopropylbenzene	< 2.0
Bromochloromethane	< 2.0	4-Isopropyltoluene	< 2.0
Bromomethane	< 2.0	MTBE	52.5
n-Butylbenzene	< 2.0	Naphthalene	< 4.0
sec-Butylbenzene	< 2.0	n-Propylbenzene	< 2.0
tert-Butylbenzene	< 2.0	Styrcne	< 2.0
Carbon tetrachloride	< 2.0	1,1,1,2-Tetrachloroethane	< 2.0
Chlorobenzene	< 2.0	1,1,2,2-Tetrachloroethane	< 4.0
Chloroethane	< 2.0	Tetrachloroethene	< 2.0
Chloromethane	< 2.0	Toluene	< 2.0
4-Chlorotoluene	< 4.0	1,2,3-Trichlorobenzene	< 2.0
2-Chlorotoluene	< 4.0	1,2,4-Trichlorobenzene	< 2.0
Dibromomethane	< 4.0	1,1,1-Trichloroethane	< 2.0
1,2-Dichlorobenzene	< 2.0	1,1,2-Trichloroethane	< 2.0
1,3-Dichlorobenzene	< 2.0	Trichloroethene	< 2.0
1,4-Dichlorobenzene	< 2.0	Trichlorofluoromethane	< 4.0
Dichlorodifluoromethane	< 2.0	1,2,3-Trichloropropane	< 2.0
1,1-Dichloroethane	< 2.0	1,2,4-Trimethylbenzene	< 2.0
1,2-Dichloroethane	2.3	1,3,5-Trimethylbenzene	< 2.0
1,1-Dichloroethene	< 2.0	Vinyl Chloride	< 2.0
cis-1,2-Dichloroethene	< 2.0	Xylenes, Total	< 4.0
trans-1,2-Dichloroethene	< 2.0	Bromodichloromethane	< 2.0
Dichloromethane	< 4.()	Bromoform	< 2.0
1,2-Dichloropropane	< 2.0	Chloroform	< 2.0
1,3-Dichloropropane	< 2.0	Dibromochloromethane	< 2.0
2,2-Dichloropropane	< 2.0	Total Trihalomethanes	< 2.0
1,1-Dichloropropene	< 2.0	Surrogate [	97.%
cis-1,3-Dichloropropene	< 2.0	Surrogate 2	98.%
trans-1,3-Dichloropropene	< 2.0	UIP's	0.
Ethylbenzene	< 2.0		



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## LABORATORY REPORT EPA 524.2

CLIENT: Griffin International

PROJECT: Clarendon Gen. Store/10924304

SITE: Lakachina Mid

DATE RECEIVED: January 23, 2002

REPORT DATE: February 12, 2002 ANALYSIS DATE: January 25, 2002 ORDER ID: 16148

REFERENCE NUMBER: 187317

DATE SAMPLED: January 22, 2002

TIME SAMPLED: 10:38 AM

	Result		Result
<u>Parameter</u>	<u>ue/L</u>	<u>Parameter</u>	<u>ug/L</u>
Benzene	< 0.5	Hexachlorobutadiene	< 0.5
Bromobenzene	< 0.5	Isopropylbenzene	< 0.5
Bromochloromethane	< 0.5	4-Isopropyltoluene	< 0.5
Bromomethane	< 0.5	MTBE	1.8
n-Butylbenzene	< 0.5	Naphthalene	< 1.0
see-Butylbenzene	< 0.5	n-Propylbenzene	< 0.5
tert-Butylbenzene	< 0.5	Styrene	< 0.5
Carbon tetrachloride	< 0.5	1,1,1,2-Tetrachloroethane	< ().5
Chlorobenzene	< 0.5	1,1,2,2-Tetrachloroethane	< 1.0
Chloroethane	< 0.5	Tetrachloroethene	< 0.5
Chloromethane	< 0.5	Toluene	< 0.5
4-Chlorotoluene	< 1.0	1,2,3-Trichlorobenzene	< 0.5
2-Chlorotoluene	< 1.0	1,2,4-Trichlorobenzene	< 0.5
Dibromomethane	< 1.0	1,1,1-Trichloroethane	< 0.5
1,2-Dichlorobenzene	< 0.5	1,1,2-Trichloroethane	< 0.5
1,3-Dichlorobenzene	< 0.5	Trichloroethene	< 0.5
1,4-Dichlorobenzene	< 0.5	Trichlorofluoromethane	< 1.0
Dichlorodifluoromethane	< 0.5	1,2,3-Trichloropropane	< 0.5
1,1-Dichloroethanc	< 0.5	1,2,4-Trimethylbenzene	< 0.5
1,2-Dichloroethane	< 0.5	1,3,5-Trimethylbenzene	< 0.5
1,1-Dichloroethene	< 0.5	Vinyl Chloride	< 0.5
cis-1,2-Dichloroethene	< 0.5	Xylenes, Total	< 1.0
trans-1,2-Dichloroethene	< 0.5	Bromodichloromethane	< 0.5
Dichloromethane	< 1.0	Bromoform	< ().5
1,2-Dichloropropane	< 0.5	Chloroform	< 0.5
1,3-Dichloropropane	< 0.5	Dibromochloromethane	< 0.5
2,2-Dichloropropane	< 0.5	Total Trihalomethancs	< 0.5
1,1-Dichloropropene	< 0.5	Surrogate 1	88.%
cis-1,3-Dichloropropene	< 0.5	Surrogate 2	84.%
trans-1,3-Dichloropropene	< 0.5	UIP's	0.
Ethylbenzene	< 0.5		



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## LABORATORY REPORT EPA 524.2

CLIENT: Griffin International

PROJECT: Clarendon Gen. Store/10924304

SITE: Lakachina Eff

DATE RECEIVED: January 23, 2002 REPORT DATE: February 12, 2002 ANALYSIS DATE: January 25, 2002 ORDER ID: 16148

REFERENCE NUMBER: 187318 DATE SAMPLED: January 22, 2002

TIME SAMPLED: 10:37 AM

	Result		Result
<u>Parameter</u>	ug/L	<u>Parameter</u>	<u>ug/L</u>
Benzene	< 0.5	Hexachlorobutadiene	< 0.5
Bromobenzene	< 0.5	Isopropylbenzene	< 0.5
Bromochloromethane	< 0.5	4-Isopropyltoluene	< 0.5
Bromomethane	< 0.5	MTBE	< 1.0
n-Butylbenzene	< 0.5	Naphthalene	< 1.0
sec-Butylbenzene	< 0.5	n-Propylbenzene	< 0.5
tert-Butylbenzene	< 0.5	Styrene	< 0.5
Carbon tetrachloride	< 0.5	1,1,1,2-Tetrachloroethane	< 0.5
Chlorobenzene	< 0.5	1,1,2,2-Tetrachloroethane	< 1.0
Chloroethane	< 0.5	Tetrachloroethene	< 0.5
Chloromethane	< 0.5	Toluene	< 0.5
2-Chlorotoluene	< 1.0	1,2,3-Trichlorobenzene	< 0.5
4-Chlorotoluene	< 1.0	1,2,4-Trichlorobenzene	< 0.5
Dibromomethane	< 1.0	1,1,1-Trichloroethane	< 0.5
1,2-Dichlorobenzene	< 0.5	1,1,2-Trichloroethane	< 0.5
1,3-Dichlorobenzene	< 0.5	Trichlorocthene	< 0.5
1,4-Dichlorobenzene	< 0.5	Trichlorofluoromethane	< 1.0
Dichlorodifluoromethane	< 0.5	1,2,3-Trichloropropane	< 0.5
1,1-Dichloroethane	< 0.5	1,2,4-Trimethylbenzene	< 0.5
1,2-Dichloroethane	< ().5	t,3,5-Trimethylbenzene	< 0.5
1,1-Dichloroethene	< 0.5	Vinyl Chloride	< 0.5
cis-1,2-Dichloroethene	< 0.5	Xylenes, Total	< 1.0
trans-1,2-Dichloroethene	< 0.5	Bromodichloromethane	< 0.5
Dichloromethane	< 1.0	Bromoform	< 0.5
1,2-Dichloropropane	< 0.5	Chloroform	< 0.5
1,3-Dichloropropane	< 0.5	Dibromochloromethane	< 0.5
2,2-Dichloropropane	< 0.5	Total Trihalomethanes	< 0.5
1,1-Dichloropropene	< 0.5	Surrogate 1	90.%
cis-1,3-Dichloropropene	< 0.5	Surrogate 2	86.%
trans-1,3-Dichloropropene	< 0.5	UIP's	0.
Ethylbenzene	< 0.5		



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#### LABORATORY REPORT

EPA 524.2

CLIENT: Griffin International

PROJECT: Clarendon Gen. Store/10924304

SITE: Whisp. Pines Eff

DATE RECEIVED: January 23, 2002 REPORT DATE: February 12, 2002

ANALYSIS DATE: February 5, 2002

ORDER ID: 16148

REFERENCE NUMBER: 187319 DATE SAMPLED: January 22, 2002

TIME SAMPLED: 10:00 AM

	Result		Result
<u>Parameter</u>	<u>пе/L</u>	<u>Parameter</u>	$\underline{\mathbf{ug}/\mathbf{L}}$
Benzene	< 0.5	Hexachlorobutadiene	< 0.5
Bromobenzene	< 0.5	Isopropylbenzene	< 0.5
Bromochloromethane	< 0.5	4-Isopropyltoluene	< 0.5
Bromomethane	< 0.5	MTBE	< 1.0
n-Butylbenzene	< 0.5	Naphthalene	< 1.0
see-Butylbenzene	< 0.5	n-Propylbenzene	< 0.5
tert-Butylbenzene	< 0.5	Styrene	< 0.5
Carbon tetrachloride	< 0.5	1,1,1,2-Tetrachloroethane	< 0.5
Chlorobenzene	< 0.5	1,1,2,2-Tetrachloroethane	< 1.0
Chloroethane	< 0.5	Tetrachloroethene	< 0.5
Chloromethane	< 0.5	Toluene	< 0.5
2-Chlorotoluene	< 1.0	1,2,3-Trichlorobenzene	< 0.5
4-Chlorotoluene	< 1.0	1,2,4-Trichlorobenzene	< 0.5
Dibromomethane	< 1.0	1,1,1-Trichloroethane	< 0.5
1,2-Dichlorobenzene	< 0.5	1,1,2-Trichloroethane	< 0.5
1,3-Dichlorobenzene	< 0.5	Trichloroethene	< 0.5
1,4-Dichlorobenzene	< 0.5	Trichlorofluoromethane	< 1.0
Dichlorodifluoromethane	< 0.5	1,2,3-Trichloropropane	< 0.5
1,1-Dichloroethane	< 0.5	1,2,4-Trimethylbenzene	< 0.5
1,2-Dichloroethane	< 0.5	1,3,5-Trimethylbenzene	< 0.5
1,1-Dichloroethene	< 0.5	Vinyl Chloride	< 0.5
cis-1,2-Dichloroethene	< 0.5	Xylenes, Total	< 1.0
trans-1,2-Dichloroethene	< 0.5	Bromodichloromethane	3.7
Dichloromethane	< 1.0	Bromoform	0.7
1,2-Dichloropropane	< 0.5	Chloroform	3.9
1,3-Dichloropropane	< 0.5	Dibromochloromethane	3.1
2,2-Dichloropropanc	< 0.5	Total Trihalomethanes	11.4
1,1-Dichloropropene	< 0.5	Surrogate I	90.%
cis-1,3-Dichloropropene	< 0.5	Surrogate 2	81.%u
trans-1,3-Dichloropropene	< 0.5	UII"s	0.
Ethylbenzene	< 0.5		



160 James Brown Drive Williston, Vermont 05495 (802) 879-4333 FAX 879-7103

# LABORATORY REPORT EPA 524.2

CLIENT: Griffin International

PROJECT: Clarendon Gen. Store/10924304

SITE: Whisp. Pines In

DATE RECEIVED: January 23, 2002

REPORT DATE: February 12, 2002 ANALYSIS DATE: February 5, 2002 ORDER ID: 16148

REFERENCE NUMBER: 187320 DATE SAMPLED: January 22, 2002

TIME SAMPLED: 9:58 AM

	Result		Result
<u>Parameter</u>	ug/L	<u>Parameter</u>	ug/L
Benzene	< 0.5	Hexachlorobutadiene	< 0.5
Bromobenzene	< 0.5	Isopropylbenzene	< ().5
Bromochloromethane	< 0.5	4-Isopropyltoluene	< 0.5
Bromomethane	< 0.5	MTBE	49.8
n-Butylbenzene	< 0.5	Naphthalene	< 1.0
sec-Butylbenzene	< 0.5	n-Propylbenzene	< 0.5
tert-Butylbenzene	< 0.5	Styrene	< 0.5
Carbon tetrachloride	< 0.5	1,1,1,2-Tetrachloroethane	< 0.5
Chlorobenzene	< 0.5	1,1,2,2-Tetrachloroethane	< 1.0
Chloroethane	< 0.5	Tetrachloroethene	< 0.5
Chloromethane	< 0.5	Toluene	< 0.5
2-Chlorotoluene	< 1.0	1,2,3-Trichlorobenzene	< 0.5
4-Chlorotoluene	< 1.0	1,2,4-Trichlorobenzene	< 0.5
Dibromomethane	< 1.0	1,1,1-Trichloroethane	< 0.5
1,2-Dichlorobenzene	< 0.5	1,1,2-Trichloroethane	< 0.5
1,3-Dichlorobenzene	< 0.5	Trichloroethene	< 0.5
1,4-Dichlorobenzene	< 0.5	Trichlorofluoromethane	< 1.0
Dichlorodifluoromethane	< 0.5	1,2,3-Trichloropropane	< 0.5
1,1-Dichloroethane	< 0.5	1,2,4-Trimethylbenzene	< 0.5
1,2-Dichloroethane	< 0.5	1,3,5-Trimethylbenzene	< 0.5
1,1-Dichloroethene	< 0.5	Vinyl Chloride	< 0.5
cis-1,2-Dichloroethene	< 0.5	Xylenes, Total	< 1.0
trans-1,2-Dichloroethene	< 0.5	Bromodichloromethane	< 0.5
Dichloromethane	< 1.0	Bromoform	< 0.5
1,2-Dichloropropane	< 0.5	Chloroform	< 0.5
1,3-Dichloropropane	< 0.5	Dibromochloromethane	< 0.5
2,2-Dichloropropane	< 0.5	Total Trihalomethanes	< 0.5
1,1-Dichloropropene	< 0.5	Surrogate 1	90.%
cis-1,3-Dichloropropene	< 0.5	Surrogate 2	83.%
trans-1,3-Dichloropropene	< 0.5	UIP's	0.
Ethylbenzene	< 0.5		

### **ENDYNE**, INC. 160 James Brown Drive Williston, Vermont 05495

# CHAIN-OF-CUSTODY-RECORD

37682

(802) 879-4333 Special Reporting Instructions: Project Name: Clarendon General Store Reporting Address: 67 Billing Address: 💪 🌫 <u>Jorgensen's Honda</u> Endyne Order ID: -0 Company: 67 Sampler Name: AD 16148 -I (Lab Use Only) Contact Name/Phone #: AN Phone #: -S

Ref# (Lab Use Only)	Sample Identification		Matrix	GRA	C O M P	Date/Time	Sample Containers		·Field Results/Remarks	Analysis	Sample	Rush
	Alexander		<u> </u>	B	P.	1-22-02	No.	Type/Size	Tell results	Required	Preservation	Kusii
187313	P. Jewistick	Influent	H20	*		10:19	λ	400L		34	44	
187314		Mid Point	<u> </u>	j		לניסו	i			1	1	
187315		Efflent	L ST			10.23				† †	1-1	
187316	Lukachina	Influent	T ack			10:40				<del>   </del>		
187318		Midpoint	r_ — —			10:38				+ +		
187319		Fffhaal	ampled 12/02 m			10:37		<del>                                     </del>				
187320	whispening	Pines Influent	(A) 2-1			10,00				<del>                                      </del>	11, 1	
187321		Effloort	6 ≥	$\sqrt{}$		9:58	V	\/		$+ \psi$		
			18731 as per				<b>—</b>	<b>                                     </b>	<u>,, , , , , , , , , , , , , , , , , , ,</u>	<u> </u>	<del>                                     </del>	
			· "—			<del></del>				<del> </del>	1	

Kelin	quished by:		1	ite/Time -22-0 ?: <u>25</u>	2	ived by:	J-		1/23/62 10:04	2 Resid	cived by:	rubec	Date/Time 1 0:20
New York State Project: Yes No _X Requested Analyses											Delivery:	LAB USE CNLY	
1	рН	6	TKN	111	Total Solids	16	Sulfate	21	1664 TPH/FOG	26	8270 PAH	Temp:	<u></u>
2	Chloride	7	Total P	12	TSS	17	Coliform (Specify)	22	8015 GRO	27	PP13 Metals		Comment:
3	Ammonia N	8	Total Diss. P	13	TD\$	18	COD	23	8015 DRO	28	RCRA8 Metals		
4	Nitrite N	9	BOD	14	Turbidity	19	8021B	24	8260/8260B	29			
5	Nitrate N	10	Alkalinity	15	Conductivity	20	8010/8020	25	8270 B/N or Acid	30	·		
31													
32													
129													